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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,286	10/10/2001	Christopher Peiffer	1014-152US01	9849

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EXAMINER
PATEL, HARESH N

ART UNIT	PAPER NUMBER
2454	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pairdocketing@ssiplaw.com

	Application No.	Applicant(s)
Office Action Summary	09/975,286	PEIFFER, CHRISTOPHER
	Examiner	Art Unit	
	HARESH N. PATEL	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 September 2008_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-5,7,8 and 11-26_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-5,7,8 and 11-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-5, 7, 8, 11-26 are subject to examination. Claims 6, 9, and 10 are cancelled.

2.   Applicant's arguments presented in the appeal brief, (i.e., the rejection of claim 1 did not even refer to or comment on the second step, i.e., performing a bitwise operation between a predefined flag and a result of the exclusive OR operation, …, For at least this reason the rejection must be withdrawn), are persuasive and, therefore, the finality of previous office action is <u>withdrawn</u> and <u>the prosecution is hereby reopened</u>. However, upon further consideration of the available prior arts, the claimed subject matter (which was amended by the applicant on 11/30/2006 in response to the rejections made in a non-final office action dated 8/30/2006) is rejected with the new grounds of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1, 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Reiche et al.

6,092,196, Nortel Networks Limited (Hereinafter Reiche-Nortel-Networks).

5.   Referring to claim 1, Reiche-Nortel-Networks discloses a computer implemented

method for comparing an unknown string to a predefined string (col., 5, line 1 – col., 6, line 64),

the method comprising: storing, on a network device a database containing a plurality of

predefined string (usage of HTTP Authentication server, HTTP servers, HTTP database, HTTP

Clients, HTTP browsers, etc., figure 1, col., 5, line 1 – col., 6, line 64), wherein the predefined

strings stored within the database represent known headers for a network communication

protocol (col., 5, line 1 – col., 6, line 64); receiving, with the network device, a network message

in response to receiving the network message (figure 1, col., 5, line 1 – col., 6, line 64), selecting

one of the plurality of predefined strings stored within the database of the network device (col.,

5, line 1 – col., 6, line 64); identifying a portion of the network message as an unknown string for

comparison with the selected predefined string (figure 1, col., 5, line 1 – col., 6, line 64);

performing a bitwise exclusive OR operation between an ASCII binary representation of at least

a segment of the unknown string and an ASCII binary representation of at least a segment of the

selected predefined string (col., 5, line 1 – col., 6, line 64, note: one of ordinary skilled in the art

at the time of invention very well understands that http strings are case insensitive and http

strings comparison contain inherent operations, for example, please see Knowledge Base

Document String Compare Function, Description, August 21, 2001, page 1 for the inherent case

insensitive comparison; also please see www.cyber.com, pages 3-12, August 11, 2001, page 5

for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string matching, page 4

for case insensitive string matching including matching or URLs that comprise http known and

unknown http strings); performing a bitwise operation between a predefined flag and a result of

the exclusive OR operation (col., 5, line 1 – col., 6, line 64, note: one of ordinary skilled in the

art at the time of invention very well understands that http strings are case insensitive and http

strings comparison contain inherent operations, for example, please see Knowledge Base

Document String Compare Function, Description, August 21, 2001, page 1 for the inherent case

insensitive comparison; also please see www.cyber.com, pages 3-12, August 11, 2001, page 5

for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string matching, page 4

for case insensitive string matching including matching or URLs that comprise http known and

unknown http strings); and comparing the predefined flag and a result of the bitwise operation to

produce an indication for a case-insensitive string match wherein the indication for the case-

insensitive string match indicates whether all characters of the unknown string within the

network message match all corresponding characters of the selected predefined string so as to

match one of the known headers of the network communication protocol (col., 5, line 1 – col., 6,

line 64, note: one of ordinary skilled in the art at the time of invention very well understands that

http strings are case insensitive and http strings comparison contain inherent operations, for

example, please see Knowledge Base Document String Compare Function, Description, August

21, 2001, page 1 for the inherent case insensitive comparison; also please see www.cyber.com,

pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case

insensitive string matching, page 4 for case insensitive string matching including matching or

URLs that comprise http known and unknown http strings); processing the network message

based on the indication of a case insensitive string match (col., 5, line 1 – col., 6, line 64); and

outputting a response from the network device based on the processed network message (usage

of HTTP Authentication server, HTTP servers, HTTP database, HTTP Clients, HTTP browsers,

etc., figure 1, col., 5, line 1 – col., 6, line 64).

Note: Regarding the applicant's usage of "wherein" and/or "whereby" and/or "adapted

to" and/or "adapted for" in the claimed subject matter of the claims, the claim scope is not

limited by claim language that suggests or makes optional but does not require steps to be

performed, or by claim language that does not limit a claim to a particular structure. Please see

Minton v. Nat 'l Ass 'n of Securities Dealers, Inc., 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620

(Fed. Cir. 2003)), MPEP 2111.

Further, as per the prosecution history, the preamble contains comparing an unknown

string to a predefined string, etc., which is not accomplished by the claimed subject matter, i.e.,

just by using segments of the strings for bitwise exclusive OR operation etc, see claimed subject

matter of claims that to obtain comparison of all characters of the strings. One of ordinary

skilled in the art at the time of invention would understand that the accomplishment of

comparison of strings i.e., all characters of the strings (for example lines 18-19 of claim 1)

cannot happen by using only segments of the strings (for example, lines 12-13 of claim 1) that

are used in the claimed comparison steps.

Since the claimed comparison steps utilizing only segments, i.e., "performing a bitwise

exclusive OK operation between an ASCII binary representation of at least a segment of the

unknown string and an ASCII binary representation of at least a segment of the selected

predefined string", lines 11-13, claim 1; cannot accomplish following claimed elements of the

claimed subject matter:

1) "comparing an unknown string to a predefined string" line 1, claim 1

2) produce an indication for the a case-insensitive string match, wherein the indication for

the case-insensitive string match indicates whether <u>all characters of the unknown string</u>

within the network message <u>match all corresponding characters of the selected predefined</u>

<u>string</u> so as to match one of the known headers of the network communication protocol;

6.   Referring to claim 24, Reiche-Nortel-Networks discloses a method of case-insensitive

string matching for use in a computer network (col., 5, line 1 – col., 6, line 64), the method

comprising: storing, on a network device, a plurality of predefined strings, wherein the

predefined strings represent known headers for a network communication protocol (col., 5, line

1 – col., 6, line 64); receiving with the network device, the network message selecting one of the

plurality of predefined strings stored within the network device (col., 5, line 1 – col., 6, line 64);

identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 5, line 1 – col., 6, line 64); performing at least one bitwise

exclusive OR operation between characters of the selected predefined string and corresponding

characters of the unknown string, performing a bitwise OR operation between a results of the

bitwise exclusive OR operation and a predetermined flag (col., 5, line 1 – col., 6, line 64); and

comparing the predetermined flag and a result of the bitwise OR operation to produce a single bit

output that indicates whether a case-insensitive match exists between the selected predefined

string and the unknown string (col., 5, line 1 – col., 6, line 64); processing the network message

based on the indication of the case-insensitive match (col., 5, line 1 – col., 6, line 64); and

outputting a response from the network device (col., 5, line 1 – col., 6, line 64).

7.   Referring to claim 25, Reiche-Nortel-Networks discloses a computer networking device

for improving data transfer via a computer network, the device comprising a processor

configured to compare a client HTTP header with a known HTTP header by storing, on the

networking device, a database containing a plurality of known HTTP headers(col., 5, line 1 –

col., 6, line 64); receiving with the networking device, a client HTTP header in response to

receiving the client HTTP header, selecting one of the known HTTP headers stored within the

database of the network device (col., 5, line 1 – col., 6, line 64); performing a bitwise exclusive

OR, operation on binary representations of the HTTP header and the known HTTP header

selected from the database, performing a bitwise OR operation between a result of the exclusive

OR, operation and a predetermined flag (col., 5, line 1 – col., 6, line 64); and comparing the

predetermined flag and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the client HTTP header (col., 5, line 1 – col., 6, line 64) and the

selected known HTTP header predefined processing the network message based on the

indication of the case-insensitive match and outputting a response from the network device based

on the processed network message (col., 5, line 1 – col., 6, line 64).

8.   Referring to claim 26, Reiche-Nortel-Networks an article of manufacture comprising a

storage medium having a plurality of machine-readable instructions, wherein when the

instructions arc executed by a computing system, the instructions providing for: storing, on a

network device, a database containing a plurality of predefined strings (col., 5, line 1 – col., 6,

line 64), wherein the predefined strings stored, within the database represent known headers for a

network communication protocol receiving with the network device (col., 5, line 1 – col., 6, line

64), a network message in response to receiving the network message (col., 5, line 1 – col., 6,

line 64), selecting one of the plurality of predefined strings, stored within the database of the

network device (col., 5, line 1 – col., 6, line 64); identifying a portion of the network message as

an unknown string for comparison with the selected predefined string (col., 5, line 1 – col., 6,

line 64); performing a bitwise exclusive OR operation between an ASCII binary representation

of at least a segment of the unknown string and an ASCII binary representation of at least a

segment of the selected predefined string; performing a bitwise operation between a predefined

flag and a result of the exclusive OR operation(col., 5, line 1 – col., 6, line 64); and comparing

the predefined and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the predefined string and the unknown string (col., 5, line 1 –

col., 6, line 64), wherein the indication for the case-insensitive match indicates whether all

characters of the unknown string within the network message match all corresponding characters

of the identified predefined string so as to match one of the known headers of the network

communication protocol (col., 5, line 1 – col., 6, line 64); processing the network message based

on the indication of the case-insensitive match and outputting a response from the network

device based on the processed network message (col., 5, line 1 – col., 6, line 64).

9.   Claims 1, 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Aviani, Jr. et

al. 6,532,493, Cisco Technology (Hereinafter Aviani-Cisco-Technology).

10.   Referring to claim 1, Aviani-Cisco-Technology discloses a computer implemented

method for comparing an unknown string to a predefined string (col., 6, line 20 - col., 8, line 26),

the method comprising: storing, on a network device a database containing a plurality of

predefined string (col., 6, line 20 - col., 8, line 26), wherein the predefined strings stored within

the database represent known headers for a network communication protocol (col., 6, line 20 -

col., 8, line 26); receiving, with the network device, a network message in response to receiving

the network message (col., 6, line 20 - col., 8, line 26), selecting one of the plurality of

predefined strings stored within the database of the network device (col., 6, line 20 - col., 8, line

26); identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 6, line 20 - col., 8, line 26); performing a bitwise exclusive OR

operation between an ASCII binary representation of at least a segment of the unknown string

and an ASCII binary representation of at least a segment of the selected predefined string (col.,

6, line 20 - col., 8, line 26, note: one of ordinary skilled in the art at the time of invention very

well understands that http strings are case insensitive and http strings comparison contain

inherent operations, for example, please see Knowledge Base Document String Compare

Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also

please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND,

OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string

matching including matching or URLs that comprise http known and unknown http strings);

performing a bitwise operation between a predefined flag and a result of the exclusive OR

operation (col., 6, line 20 - col., 8, line 26, note: one of ordinary skilled in the art at the time of

invention very well understands that http strings are case insensitive and http strings comparison

contain inherent operations, for example, please see Knowledge Base Document String Compare

Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also

please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND,

OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string

matching including matching or URLs that comprise http known and unknown http strings); and

comparing the predefined flag and a result of the bitwise operation to produce an indication for a

case-insensitive string match wherein the indication for the case-insensitive string match

indicates whether all characters of the unknown string within the network message match all

corresponding characters of the selected predefined string so as to match one of the known

headers of the network communication protocol (col., 6, line 20 - col., 8, line 26, note: one of

ordinary skilled in the art at the time of invention very well understands that http strings are case

insensitive and http strings comparison contain inherent operations, for example, please see

Knowledge Base Document String Compare Function, Description, August 21, 2001, page 1 for

the inherent case insensitive comparison; also please see www.cyber.com, pages 3-12, August

11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string

matching, page 4 for case insensitive string matching including matching or URLs that comprise

http known and unknown http strings); processing the network message based on the indication

of a case insensitive string match (col., 6, line 20 - col., 8, line 26); and outputting a response

from the network device based on the processed network message (col., 6, line 20 - col., 8, line

26).

11.   Referring to claim 24, Aviani-Cisco-Technology discloses a method of case-insensitive

string matching for use in a computer network (col., 6, line 20 - col., 8, line 26), the method

comprising: storing, on a network device, a plurality of predefined strings, wherein the

predefined strings represent known headers for a network communication protocol (col., 6, line

20 - col., 8, line 26); receiving with the network device, the network message selecting one of the

plurality of predefined strings stored within the network device (col., 6, line 20 - col., 8, line 26);

identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 6, line 20 - col., 8, line 26); performing at least one bitwise

exclusive OR operation between characters of the selected predefined string and corresponding

characters of the unknown string, performing a bitwise OR operation between a results of the

bitwise exclusive OR operation and a predetermined flag (col., 6, line 20 - col., 8, line 26); and

comparing the predetermined flag and a result of the bitwise OR operation to produce a single bit

output that indicates whether a case-insensitive match exists between the selected predefined

string and the unknown string (col., 6, line 20 - col., 8, line 26); processing the network message

based on the indication of the case-insensitive match (col., 6, line 20 - col., 8, line 26); and

outputting a response from the network device (col., 6, line 20 - col., 8, line 26).

12.   Referring to claim 25, Aviani-Cisco-Technology discloses a computer networking device

for improving data transfer via a computer network, the device comprising a processor

configured to compare a client HTTP header with a known HTTP header by storing, on the

networking device, a database containing a plurality of known HTTP headers(col., 6, line 20 -

col., 8, line 26); receiving with the networking device, a client HTTP header in response to

receiving the client HTTP header, selecting one of the known HTTP headers stored within the

database of the network device (col., 6, line 20 - col., 8, line 26); performing a bitwise exclusive

OR, operation on binary representations of the HTTP header and the known HTTP header

selected from the database, performing a bitwise OR operation between a result of the exclusive

OR, operation and a predetermined flag (col., 6, line 20 - col., 8, line 26); and comparing the

predetermined flag and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the client HTTP header (col., 6, line 20 - col., 8, line 26) and

the selected known HTTP header predefined processing the network message based on the

indication of the case-insensitive match and outputting a response from the network device based

on the processed network message (col., 6, line 20 - col., 8, line 26).

13.   Referring to claim 26, Aviani-Cisco-Technology an article of manufacture comprising a

storage medium having a plurality of machine-readable instructions, wherein when the

instructions arc executed by a computing system, the instructions providing for: storing, on a

network device, a database containing a plurality of predefined strings (col., 6, line 20 - col., 8,

line 26), wherein the predefined strings stored, within the database represent known headers for a

network communication protocol receiving with the network device (col., 6, line 20 - col., 8, line

26), a network message in response to receiving the network message (col., 6, line 20 - col., 8,

line 26), selecting one of the plurality of predefined strings, stored within the database of the

network device (col., 6, line 20 - col., 8, line 26); identifying a portion of the network message as

an unknown string for comparison with the selected predefined string (col., 6, line 20 - col., 8,

line 26); performing a bitwise exclusive OR operation between an ASCII binary representation

of at least a segment of the unknown string and an ASCII binary representation of at least a

segment of the selected predefined string; performing a bitwise operation between a predefined

flag and a result of the exclusive OR operation(col., 6, line 20 - col., 8, line 26); and comparing

the predefined and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the predefined string and the unknown string (col., 6, line 20 -

col., 8, line 26), wherein the indication for the case-insensitive match indicates whether all

characters of the unknown string within the network message match all corresponding characters

of the identified predefined string so as to match one of the known headers of the network

communication protocol (col., 6, line 20 - col., 8, line 26); processing the network message based

on the indication of the case-insensitive match and outputting a response from the network

device based on the processed network message (col., 6, line 20 - col., 8, line 26).

14.   Claims 1, 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Wein et al.

7,240,100, Akami Technology (Hereinafter Wein-Akami-Technology).

15.   Referring to claim 1, Wein-Akami-Technology discloses a computer implemented

method for comparing an unknown string to a predefined string (col., 5, line 10 - col., 6, line 59),

the method comprising: storing, on a network device a database containing a plurality of

predefined string (col., 5, line 10 - col., 6, line 59), wherein the predefined strings stored within

the database represent known headers for a network communication protocol (col., 5, line 10 -

col., 6, line 59); receiving, with the network device, a network message in response to receiving

the network message (col., 5, line 10 - col., 6, line 59), selecting one of the plurality of

predefined strings stored within the database of the network device (col., 5, line 10 - col., 6, line

59); identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 5, line 10 - col., 6, line 59); performing a bitwise exclusive OR

operation between an ASCII binary representation of at least a segment of the unknown string

and an ASCII binary representation of at least a segment of the selected predefined string (col.,

5, line 10 - col., 6, line 59, note: one of ordinary skilled in the art at the time of invention very well understands that http strings are case insensitive and http strings comparison contain inherent operations, for example, please see Knowledge Base Document String Compare Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string matching including matching or URLs that comprise http known and unknown http strings); performing a bitwise operation between a predefined flag and a result of the exclusive OR operation (col., 5, line 10 - col., 6, line 59, note: one of ordinary skilled in the art at the time of invention very well understands that http strings are case insensitive and http strings comparison contain inherent operations, for example, please see Knowledge Base Document String Compare Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string matching including matching or URLs that comprise http known and unknown http strings); and comparing the predefined flag and a result of the bitwise operation to produce an indication for a case-insensitive string match wherein the indication for the case-insensitive string match indicates whether all characters of the unknown string within the network message match all corresponding characters of the selected predefined string so as to match one of the known headers of the network communication protocol (col., 5, line 10 - col., 6, line 59, note: one of ordinary skilled in the art at the time of invention very well understands that http strings are case insensitive and http strings comparison contain inherent operations, for example, please see

Knowledge Base Document String Compare Function, Description, August 21, 2001, page 1 for

the inherent case insensitive comparison; also please see www.cyber.com, pages 3-12, August

11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string

matching, page 4 for case insensitive string matching including matching or URLs that comprise

http known and unknown http strings); processing the network message based on the indication

of a case insensitive string match (col., 5, line 10 - col., 6, line 59); and outputting a response

from the network device based on the processed network message (col., 5, line 10 - col., 6, line

59).

16.   Referring to claim 24, Wein-Akami-Technology discloses a method of case-insensitive

string matching for use in a computer network (col., 5, line 10 - col., 6, line 59), the method

comprising: storing, on a network device, a plurality of predefined strings, wherein the

predefined strings represent known headers for a network communication protocol (col., 5, line

10 - col., 6, line 59); receiving with the network device, the network message selecting one of the

plurality of predefined strings stored within the network device (col., 5, line 10 - col., 6, line 59);

identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 5, line 10 - col., 6, line 59); performing at least one bitwise

exclusive OR operation between characters of the selected predefined string and corresponding

characters of the unknown string, performing a bitwise OR operation between a results of the

bitwise exclusive OR operation and a predetermined flag (col., 5, line 10 - col., 6, line 59); and

comparing the predetermined flag and a result of the bitwise OR operation to produce a single bit

output that indicates whether a case-insensitive match exists between the selected predefined

string and the unknown string (col., 5, line 10 - col., 6, line 59); processing the network message

based on the indication of the case-insensitive match (col., 5, line 10 - col., 6, line 59); and

outputting a response from the network device (col., 5, line 10 - col., 6, line 59).

17.   Referring to claim 25, Wein-Akami-Technology discloses a computer networking device

for improving data transfer via a computer network, the device comprising a processor

configured to compare a client HTTP header with a known HTTP header by storing, on the

networking device, a database containing a plurality of known HTTP headers(col., 5, line 10 -

col., 6, line 59); receiving with the networking device, a client HTTP header in response to

receiving the client HTTP header, selecting one of the known HTTP headers stored within the

database of the network device (col., 5, line 10 - col., 6, line 59); performing a bitwise exclusive

OR, operation on binary representations of the HTTP header and the known HTTP header

selected from the database, performing a bitwise OR operation between a result of the exclusive

OR, operation and a predetermined flag (col., 5, line 10 - col., 6, line 59); and comparing the

predetermined flag and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the client HTTP header (col., 5, line 10 - col., 6, line 59) and

the selected known HTTP header predefined processing the network message based on the

indication of the case-insensitive match and outputting a response from the network device based

on the processed network message (col., 5, line 10 - col., 6, line 59).

18.   Referring to claim 26, Wein-Akami-Technology an article of manufacture comprising a

storage medium having a plurality of machine-readable instructions, wherein when the

instructions arc executed by a computing system, the instructions providing for: storing, on a

network device, a database containing a plurality of predefined strings (col., 5, line 10 - col., 6,

line 59), wherein the predefined strings stored, within the database represent known headers for a

network communication protocol receiving with the network device (col., 5, line 10 - col., 6, line

59), a network message in response to receiving the network message (col., 5, line 10 - col., 6,

line 59), selecting one of the plurality of predefined strings, stored within the database of the

network device (col., 5, line 10 - col., 6, line 59); identifying a portion of the network message as

an unknown string for comparison with the selected predefined string (col., 5, line 10 - col., 6,

line 59); performing a bitwise exclusive OR operation between an ASCII binary representation

of at least a segment of the unknown string and an ASCII binary representation of at least a

segment of the selected predefined string; performing a bitwise operation between a predefined

flag and a result of the exclusive OR operation(col., 5, line 10 - col., 6, line 59); and comparing

the predefined and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the predefined string and the unknown string (col., 5, line 10 -

col., 6, line 59), wherein the indication for the case-insensitive match indicates whether all

characters of the unknown string within the network message match all corresponding characters

of the identified predefined string so as to match one of the known headers of the network

communication protocol (col., 5, line 10 - col., 6, line 59); processing the network message based

on the indication of the case-insensitive match and outputting a response from the network

device based on the processed network message (col., 5, line 10 - col., 6, line 59).

19.   Claims 1, 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Giles et al.

6,986,047, International Business Machines (Hereinafter Giles-IBM).

20.   Referring to claim 1, Giles-IBM discloses a computer implemented method for

comparing an unknown string to a predefined string (comparison of http header hash, col., 5, line

12 - col., 6, line 58), the method comprising: storing, on a network device a database containing

a plurality of predefined string (col., 5, line 12 - col., 6, line 58), wherein the predefined strings

stored within the database represent known headers for a network communication protocol (col.,

5, line 12 - col., 6, line 58); receiving, with the network device, a network message in response to

receiving the network message (col., 5, line 12 - col., 6, line 58), selecting one of the plurality of

predefined strings stored within the database of the network device (col., 5, line 12 - col., 6, line

58); identifying a portion of the network message as an unknown string for comparison with the

selected predefined string (col., 5, line 12 - col., 6, line 58); performing a bitwise exclusive OR

operation between an ASCII binary representation of at least a segment of the unknown string

and an ASCII binary representation of at least a segment of the selected predefined string (col.,

5, line 12 - col., 6, line 58, note: one of ordinary skilled in the art at the time of invention very

well understands that http strings are case insensitive and http strings comparison contain

inherent operations, for example, please see Knowledge Base Document String Compare

Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also

please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND,

OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string

matching including matching or URLs that comprise http known and unknown http strings);

performing a bitwise operation between a predefined flag and a result of the exclusive OR

operation (col., 5, line 12 - col., 6, line 58, note: one of ordinary skilled in the art at the time of

invention very well understands that http strings are case insensitive and http strings comparison

contain inherent operations, for example, please see Knowledge Base Document String Compare

Function, Description, August 21, 2001, page 1 for the inherent case insensitive comparison; also

please see www.cyber.com, pages 3-12, August 11, 2001, page 5 for use of exclusive OR, AND,

OR and NOT / Flag for case insensitive string matching, page 4 for case insensitive string

matching including matching or URLs that comprise http known and unknown http strings); and

comparing the predefined flag and a result of the bitwise operation to produce an indication for a

case-insensitive string match wherein the indication for the case-insensitive string match

indicates whether all characters of the unknown string within the network message match all

corresponding characters of the selected predefined string so as to match one of the known

headers of the network communication protocol (col., 5, line 12 - col., 6, line 58, note: one of

ordinary skilled in the art at the time of invention very well understands that http strings are case

insensitive and http strings comparison contain inherent operations, for example, please see

Knowledge Base Document String Compare Function, Description, August 21, 2001, page 1 for

the inherent case insensitive comparison; also please see www.cyber.com, pages 3-12, August

11, 2001, page 5 for use of exclusive OR, AND, OR and NOT / Flag for case insensitive string

matching, page 4 for case insensitive string matching including matching or URLs that comprise

http known and unknown http strings); processing the network message based on the indication

of a case insensitive string match (col., 5, line 12 - col., 6, line 58); and outputting a response

from the network device based on the processed network message (response messages based on

comparison of http header hash, col., 5, line 12 - col., 6, line 58).

21.   Referring to claim 24, Giles-IBM discloses a method of case-insensitive string matching

for use in a computer network (col., 5, line 12 - col., 6, line 58), the method comprising: storing,

on a network device, a plurality of predefined strings, wherein the predefined strings represent

known headers for a network communication protocol (col., 5, line 12 - col., 6, line 58);

receiving with the network device, the network message selecting one of the plurality of

predefined strings stored within the network device (col., 5, line 12 - col., 6, line 58); identifying

a portion of the network message as an unknown string for comparison with the selected

predefined string (col., 5, line 12 - col., 6, line 58); performing at least one bitwise exclusive OR

operation between characters of the selected predefined string and corresponding characters of

the unknown string, performing a bitwise OR operation between a results of the bitwise

exclusive OR operation and a predetermined flag (col., 5, line 12 - col., 6, line 58); and

comparing the predetermined flag and a result of the bitwise OR operation to produce a single bit

output that indicates whether a case-insensitive match exists between the selected predefined

string and the unknown string (col., 5, line 12 - col., 6, line 58); processing the network message

based on the indication of the case-insensitive match (col., 5, line 12 - col., 6, line 58); and

outputting a response from the network device (col., 5, line 12 - col., 6, line 58).

22.   Referring to claim 25, Giles-IBM discloses a computer networking device for improving

data transfer via a computer network, the device comprising a processor configured to compare a

client HTTP header with a known HTTP header by storing, on the networking device, a database

containing a plurality of known HTTP headers(col., 5, line 12 - col., 6, line 58); receiving with

the networking device, a client HTTP header in response to receiving the client HTTP header,

selecting one of the known HTTP headers stored within the database of the network device (col.,

5, line 12 - col., 6, line 58); performing a bitwise exclusive OR, operation on binary

representations of the HTTP header and the known HTTP header selected from the database,

performing a bitwise OR operation between a result of the exclusive OR, operation and a

predetermined flag (col., 5, line 12 - col., 6, line 58); and comparing the predetermined flag and a

result of the bitwise OR operation to produce an indication for a case-insensitive string match

between the client HTTP header (col., 5, line 12 - col., 6, line 58) and the selected known HTTP

header predefined processing the network message based on the indication of the case-insensitive

match and outputting a response from the network device based on the processed network

message (col., 5, line 12 - col., 6, line 58).

23.   Referring to claim 26, Giles-IBM an article of manufacture comprising a storage medium

having a plurality of machine-readable instructions, wherein when the instructions arc executed

by a computing system, the instructions providing for: storing, on a network device, a database

containing a plurality of predefined strings (col., 5, line 12 - col., 6, line 58), wherein the

predefined strings stored, within the database represent known headers for a network

communication protocol receiving with the network device (col., 5, line 12 - col., 6, line 58), a

network message in response to receiving the network message (col., 5, line 12 - col., 6, line 58),

selecting one of the plurality of predefined strings, stored within the database of the network

device (col., 5, line 12 - col., 6, line 58); identifying a portion of the network message as an

unknown string for comparison with the selected predefined string (col., 5, line 12 - col., 6, line

58); performing a bitwise exclusive OR operation between an ASCII binary representation of at

least a segment of the unknown string and an ASCII binary representation of at least a segment

of the selected predefined string; performing a bitwise operation between a predefined flag and a

result of the exclusive OR operation(col., 5, line 12 - col., 6, line 58); and comparing the

predefined and a result of the bitwise OR operation to produce an indication for a case-

insensitive string match between the predefined string and the unknown string (col., 5, line 12 -

col., 6, line 58), wherein the indication for the case-insensitive match indicates whether all

characters of the unknown string within the network message match all corresponding characters

of the identified predefined string so as to match one of the known headers of the network

communication protocol (col., 5, line 12 - col., 6, line 58); processing the network message based

on the indication of the case-insensitive match and outputting a response from the network

device based on the processed network message (col., 5, line 12 - col., 6, line 58).

Claim Rejections - 35 USC § 103

24.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

25.   Claims 1-5, 7, 8, 11-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Branstad in view of Fielding, www.cyber.com, pages 3-12, August 11, 2001,

and "Official Notice".

26.   As per claim 1, Branstad discloses a computer-implemented method for comparing (e.g.,

col., 21, lines 21 – 27, col., 3, lines 35 – 48) an unknown string (e.g., string with or without

errors, figure 12, col., 3, lines 9 - 39) to a string (e.g., col., 3, lines 26 – 38), the method

comprising:

storing, on a network device, a database containing a plurality of predefined strings,

wherein the predefined strings stored within the database represent known headers for a network

communication protocol (col., 21, lines 3 – 27, col., 3, lines 35 – 48);

receiving, with the network device, a network message (col., 21, lines 3 – 27, col., 3,

lines 35 – 48);

in response to receiving the network message, selecting one of the plurality of predefined

strings stored within the database of the network device (e.g., col., 3, lines 26 – 38);

identifying a portion of the network message as an unknown string for comparison with

the selected predefined string (e.g., col., 3, lines 35 – 48);

performing a bitwise exclusive OR operation (e.g., col., 22, lines 2 – 21, col., 21, lines 21

– 27, col., 3, lines 35 – 48) on a segment of the unknown string (e.g., col., 19, lines 19 – 34) and

a segment of the selected predefined string (e.g., col., 20, lines 18 – 27) ; and

identifying string match based on the exclusive OR operation (e.g., col., 22, lines 2 – 21).

Bradstad also discloses exclusive OR operation between the two strings (e.g., block 1756,

block 1760, figure 17B) and a result of the exclusive OR operation (e.g., col., 22, lines 2-21,

figure 17B).

However, Branstad does not specifically mention about usage of strings having an ASCII

binary representation and string being a case-insensitive string.

Fielding discloses well-known usage of strings having an ASCII (e.g., section 3.4, page 4) binary representation (e.g., section 14.15, page 16) and string being a case-insensitive string (e.g., section 3.4, page 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Branstad with the teachings of Fielding in order to facilitate usage of strings having an ASCII binary representation and string being a case-insensitive string because the ASCII binary representation would help support communicating information among two entities using the ASCII character set. The case-insensitive implementation would support usage of characters regardless of their uppercase or lowercase.

Branstad and Fielding do not specifically mention about applying a predefined flag to the result and to produce an indication.

However, Cyber discloses the well-known concept applying a predefined flag to the result and to produce an indication, performing a bitwise operation between a predefined flag and a result of the exclusive OR operation (use of exclusive OR, AND, OR and NOT / Flag for case insensitive string matching, page 5 case insensitive string matching including matching or URLs that comprise http known and unknown http strings, page 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Branstad and Fielding with the teachings of Cyber in order to facilitate usage of applying a predefined flag to the result and to produce an indication because the predefined flag would support deciding what the result value is from the possible result values of the result. The indication would enhance supporting the communicating information, as it would provide information on whether the string match has occurred or not.

Branstad, Fielding and Cyber do disclose the string being predefined, performing a

bitwise operation between the predefined flag and the result and comparing the predefined flag

and a result of the bitwise operation.

"Official Notice" is taken that both the concept and advantages of providing usage of the

string being predefined, performing a bitwise operation between the predefined flag and the

result and comparing the predefined flag and a result of the bitwise operation, wherein the

indication for the case-insensitive string match indicates whether all characters of the unknown

string within the network message match all corresponding characters of the selected predefined

string so as to match one of the known headers, processing the network message based on the

indication of the match and outputting a response from the network device based on the

processed network message is well known and expected in the art. For example, Rob Saccoccio,

"Case insensitive compare when getting environment headers", Wed, 6, Jun 2001, Chelsea.net,

pages 1 and 2, (Hereinafter Rob-Saccoccio) discloses these limitations along with clear

motivation to overcome HTTP 1.1 specification with a fix for a need for case insensitive

compare for the HTTP headers, please see page 1. Eric Sit, "Case insensitive compare when

getting environment headers", Mon, 4, Jun 2001, pages 1 and 2, (Hereinafter Eric-Sit) discloses

these limitations along with clear motivation to overcome HTTP 1.1 specification with a fix for a

need for case insensitive compare for the environment strings, please see pages 1 and 2. Cyber et

al., U. S. Publication 2005/0246716, Microsoft Corporation, also discloses these limitations,

please see paragraphs, 28768, 28759, 19857, 19860-19864, 19874-19899, 68, 77, 14441, 14435,

20109-20115, 22, 30552, 29045-29045.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include usage of the string being predefined, the a bitwise operation between the

predefined flag and the result and comparing the predefined flag and a result of the bitwise

operation, wherein the indication for the case-insensitive string match indicates whether all

characters of the unknown string within the network message match all corresponding characters

of the selected predefined string so as to match one of the known headers, processing the

network message based on the indication of the match and outputting a response from the

network device based on the processed network message with the teachings of Branstad, Fielding

and Cyber in order to facilitate the bitwise operation and the comparison because the bitwise

operation and the comparison would provide further comparison of the value of the strings

(including predefined string) that are used for the bitwise operation and the comparison. The

operations on the strings that are used for comparison would provide whether a case-insensitive

match is occurred or not among the strings and would support processing the network message.

27.   As per claim 2, Branstad, Fielding and Cyber disclose the claimed limitations as rejected

above. Branstad also discloses the following:

       identifying a segment of the selected predefined string (e.g., col., 20, lines 18 – 27) and

identifying a segment of the unknown string (e.g., col., 19, lines 19 – 34) for comparison (e.g.,

col., 3, lines 35 – 48) with the identified segment of the selected predefined string (e.g., col., 20,

lines 18 – 27).

28.   As per claims 3, 20, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. Branstad also discloses the following:

    the segment of the predefined string and the segment of the unknown string contain a

same number of characters, the lengths of each of the strings are equal (e.g., col., 3, lines 35 –

48).

29.   As per claim 5, Branstad, Fielding and Cyber disclose the claimed limitations as rejected

above. Fielding also discloses usage of a case-insensitive (e.g., section 3.4, page 4) segment

match (e.g., section 14.16, page 17).

    It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Branstad, Fielding and Cyber in order to facilitate usage

of a case-insensitive segment match because the segment and would help support communicating

information among two entities using the ASCII character set. The case-insensitive

implementation would support usage of characters regardless of their uppercase or lowercase.

30.   As per claim 8, Branstad, Fielding and Cyber disclose the claimed limitations as rejected

above. Branstad also discloses usage identifying a subsequent segment of the selected

predefined string (e.g., col., 20, lines 18 – 27) and a subsequent segment of the unknown string

(e.g., col., 19, lines 19 – 34) for comparison (e.g., col., 3, lines 35 – 48).

31.   As per claims 14-17, 19, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. Fielding also discloses the segments each include one character (e.g., section

14.2, page 2) / four characters (e.g., section 14.19, page 19, section 14.23, page 21), the unknown

string including an HTTP header field (e.g., section, 14.1, page 1), the predefined string is from a

table of predetermined HTTP header fields (e.g., section 14, page 1, section 14.1, page 1, section

14.2, page 2), identifying the length of strings (e.g., section 14.13, page 15).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Branstad, Fielding and Cyber in order to facilitate each of

the segments each include one character / four characters, the unknown string including an

HTTP header field, the predefined string is from a table of predetermined HTTP header fields

and identifying the length of strings because the character / four characters, HTTP header field,

predetermined HTTP header field and the length of strings would enhance communicating

information among two entities using the ASCII character set. The case-insensitive

implementation would support usage of characters regardless of their uppercase or lowercase.

32.   As per claims 22 and 23, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. Fielding also discloses determining if characters of the strings are within a

predefined ASCII range (e.g., section 14.24, page 22, section 14.27, page 25), characters not

within the predefined ASCII range causes to yield a negative string match (e.g., section 14.26,

page 24).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Branstad, Fielding and Cyber in order to facilitate

determining if characters of the strings are within a predefined ASCII range and characters not

within the predefined ASCII range causes to yield a negative string match because usage of the

determination of characters within a predefined ASCII range and the negative string would

enhance communicating information among two entities using the ASCII character set. The

case-insensitive implementation would support usage of characters regardless of their uppercase

or lowercase.

33.   As per claim 4, Branstad, Fielding and Cyber disclose the claimed limitations as rejected

above. Branstad also discloses left-shifting the content of the segments if the segments contain

less than predetermined number of string contents (e.g., col., 22, lines 3 – 39).

        However, Branstad, Fielding and Cyber do not specifically mention about shifting when

less than four characters exist.

        "Official Notice" is taken that both the concept and advantages of providing usage of

shifting when less than four characters exist is well known and expected in the art. For example,

Thinkage GCOS8 SS C Reference Manual, pages 1-71, 1996, discloses usage of these

limitations, e.g., section, 2.7, page 6, section, 4.7, page 34, section, 4.12, page 36.

        It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the well-known concept of shifting when less than four characters with the

teachings of Branstad, Fielding and Cyber in order to facilitate shifting when less than four

characters exist because the shifting would enhance supporting decoding information. The

compared information would be used for utilizing the string information.

34.   As per claims 7 and 13, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. However, Branstad, Fielding and Cyber do not specifically mention about

predetermined value 0x20202020. For example, Abgrall et al., 2003/0037237, discloses the

concept of using predetermined value 0x20202020 (0x20 for each byte), e.g., paragraphs 323 and

324.

 "Official Notice" is taken that both the concept and advantages of providing

predetermined value 0x20202020 is well known and expected in the art. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to include the well-

known concept of providing predetermined value 0x20202020 with the teachings of Branstad,

Fielding and Cyber in order to facilitate using value 0x20202020 (as the predetermined value

0x20202020 represents four blank characters) would enhance supporting decoding information.

The compared information would be used for utilizing the string information.

35. As per claim 12, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. However, Branstad, Fielding and Cyber do not specifically mention about

predetermined value 0x20.

 "Official Notice" is taken that both the concept and advantages of providing

predetermined value 0x20 is well known and expected in the art. For example, Abgrall et al.,

2003/0037237, discloses the concept of using predetermined value 0x20, e.g., paragraphs 323

and 324.

 It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the well-known concept of providing predetermined value 0x20 with the

teachings of Branstad, Fielding and Cyber in order to facilitate using value 0x20 (as the

predetermined value 0x20 represents blank character) would enhance supporting decoding

information. The compared information would be used for utilizing the string information.

36.   As per claims 10, 18, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. However, Branstad, Fielding and Cyber do not specifically mention about the

result is operated on in another bitwise operation.

"Official Notice" is taken that both the concept and advantages of providing the result is

operated on in another bitwise operation is well known and expected in the art. For example,

Kontio et al., 2005/0004875, January 6, 2005, discloses these limitations, e.g., paragraphs 54 and

55.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the well-known concept of providing the result is operated on in another

bitwise operation with the teachings of Branstad, Fielding and Cyber in order to facilitate further

operating on the result because the another bitwise operation would enhance supporting decoding

information. The compared information would be used for utilizing the string information.

37.   As per claim 11, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. However, Branstad, Fielding and Cyber do not specifically mention about

predetermined value 0.

"Official Notice" is taken that both the concept and advantages of providing

predetermined value 0 is well known and expected in the art. For example, Abgrall et al.,

2003/0037237, discloses the concept of using predetermined value 0, e.g., paragraphs 323 and 324.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the well-known concept of providing predetermined value 0 with the teachings of Branstad, Fielding and Cyber in order to facilitate shifting using value 0 (as the predetermined value 0 represents null value) would enhance supporting decoding information. The compared information would be used for utilizing the string information.

38.   Claims 2-5, 7, 8, 11-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiche-Nortel-Networks in view of Branstad, Fielding, www.cyber.com, pages 3-12, August 11, 2001, and "Official Notice". Please refer to the above rejections made under Branstad, Fielding, www.cyber.com, pages 3-12, August 11, 2001, and "Official Notice" for the claims 2-5, 7, 8, 11-20, 22 and 23.

39.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Branstad, Fielding, Cyber and "Official Notice" in view of Slater et al., 6,654,796, Cisco (Hereinafter Slater)

40.   As per claim 21, Branstad, Fielding and Cyber disclose the claimed limitations as rejected above. However, Branstad, Fielding and Cyber do not specifically mention about WAN.

Slater discloses the network being WAN (e.g., col., 1, lines 55 – 67, col.,9, lines 42 – 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Branstad, Fielding and Cyber with the teachings of Slater

in order to facilitate the network being WAN because the WAN would support communicating

string information from one entity to another entity. The entity over the WAN would support

exclusive OR operation.

41.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reiche-Nortel-

Networks in view of Branstad, Fielding, www.cyber.com, pages 3-12, August 11, 2001, Slater

and "Official Notice". Please refer to the above rejections made under Branstad, Fielding,

www.cyber.com, pages 3-12, August 11, 2001, Slater and "Official Notice" for the claims 2-5, 7,

8, 11-23.

42.   Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branstad,

Fielding, Cyber and "Official Notice" in view of James et al., 6,523,108 (Hereinafter James).

43.   As per claim 24, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. Branstad also discloses the following:

      use in a computer network (e.g., col., 1, lines 36 – 54, col., 3, lines 21 - 34) and

      the corresponding characters (e.g., col., 10, lines 9 – 34).

      However, Branstad, Fielding and Cyber do not specifically mention about performing OR

operation.

      James discloses the well-known concept of performing the bitwise OR operation (usage

of logical OR gate 117).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Branstad, Fielding and Cyber with the teachings of James in order to facilitate usage of performing the bitwise OR operation because the bitwise OR operation would enhance deciding whether both the bits are having a value of "1" or not. The outcome of the bitwise OR operation i.e., "1" or "0" or would enhance informing for the string that would help support communicating information between two entities.

44.   As per claim 25, Branstad, Fielding, Cyber and James disclose the claimed limitations as rejected above. Branstad also discloses the following:

a computer networking device for improving data transfer via a computer network (e.g., col., 1, lines 36 – 54, col., 3, lines 21 - 34)

storing, on a network device, a database containing a plurality of known HTTP headers (col., 21, lines 3 – 27, col., 3, lines 35 – 48);

receiving, with the network device, a client HTTP header (col., 21, lines 3 – 27, col., 3, lines 35 – 48);

in response to receiving the the client HTTP header, selecting one of the known HTTP headers stored within the database of the network device (e.g., col., 3, lines 26 – 38);

performing a bitwise exclusive OR operation (e.g., col., 22, lines 2 – 21, col., 21, lines 21 – 27, col., 3, lines 35 – 48) on a segment of the client HTTP header (e.g., col., 19, lines 19 – 34) and the known HTTP header selected from the database (e.g., col., 20, lines 18 – 27).

45.   As per claim 26, Branstad, Fielding and Cyber disclose the claimed limitations as

rejected above. Branstad also discloses the following:

an article of manufacture comprising a storage medium having a plurality of machine-

readable instructions executed by a computing system (e.g., col., 1, lines 36 – 54, col., 3, lines 21

- 34).

Conclusion

The applicant presented amended claims on 11/30/2006 in response to the rejections

made in a non-final office action dated 8/30/2006, hence considering the applicant amended

claims over the rejections of the non-final office action and the new rejections are made due to

the applicant's amendment to the claims dated 11/30/2006, **THIS ACTION IS MADE FINAL.**

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Examiner has cited particular columns and/or paragraphs and/or sections and/or page

numbers in the reference(s) as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to

the specific limitations within the individual claim, other passages and figures may apply as well.

It is respectfully requested from the applicant in preparing responses, to fully consider the

references in entirety, as potentially teaching, all or part of the claimed invention, as well as the

context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The

examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to

8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

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